

Please amend Claims 1-6 as follows:

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A<sup>4</sup> 1. (amended) A thermal profiling device comprising:  
a packaging substrate having an upper surface;  
a semiconductor die having an active circuit surface  
secured directly to the upper surface of the packaging  
substrate; and  
a thermocouple secured directly to the active circuit  
surface of the semiconductor die.

2. (amended) The thermal profiling device of Claim 1  
wherein the thermocouple is secured using an adhesive.

3. (amended) The thermal profiling device of Claim 2  
wherein the adhesive comprises an epoxy.

4. (amended) The thermal profiling device of Claim 1  
wherein the active circuit surface has electrically conductive  
bumps formed thereon and the upper surface of the packaging  
substrate includes a plurality of bonding pads wherein the  
semiconductor die is positioned on the packaging substrate  
such that the electrically conductive bumps are in electrical  
contact with the plurality of bonding pads.

5. (amended) The thermal profiling device of Claim 4  
wherein the packaging substrate and the semiconductor die are  
secured in place by a solder bond between the electrically  
conductive bumps and the plurality of bonding pads.

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Sub B3 6. (amended) A thermal profiling device comprising:

*sub B3  
• amended*

a packaging substrate having a first surface and a second opposite surface;

an opening passing through the second opposite surface and through the first surface of the packaging substrate;

*A4  
cont.*

a semiconductor die having an active circuit surface secured directly to the first surface of the packaging substrate; and

a thermocouple positioned inside the opening and secured directly to the active circuit surface of the semiconductor die.

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